DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-005657 Address: 333 Burma Road **Date Inspected:** 08-Feb-2009

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Shen Fu You **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: OBG** Segment

Summary of Items Observed:

CALTRANS OSM Quality Assurance (QA) Inspector, Erik Prue was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. QA Inspector and/or found the following:

Outside Bay 13 lift 4BW: QA Inspector randomly observed ZPMC qualified welder ID#037996 welding various repairs in accordance with WRR BWR2014. Welder was observed welding in the 4G (overhead) position utilizing Shielded Metal Arc Welding (SMAW) process with a 4 mm diameter electrode THJ506Fe-1 (E7018-1). QA Inspector observed the ZPMC QC CWI Zhang Bao Lie verifying welding parameters and pre-heat were in accordance with the Welding Procedure Specification (WPS). QA Inspector with QC Inspector observed parameters as follows: preheat temperature to be at 100°C and measured the welding parameters to be 175 amps, 24.2 volts, a travel speed of 100 mm/min. Welding parameters verified by QA Inspector appear to be in general compliance with the approved WPS-345-SMAW-4GFCM.

QA Inspector received Non-Conformance Report NCR-152 (ZPMC-0143) from Structural Material Representative (SMR) Eric Tsang to verify NCR was resolved. NCR was written for Workmanship not in conformance with the contract documents. The bottom vertical stiffeners on four (4) the longitudinal diaphragms (LD11C-001, LD12C, LD008-002, LD006B-001) have been fillet welded to bottom plates. The bottom vertical stiffeners require to be tight fit, not welded in accordance with approved drawings. QA Inspector verified that the bottom stiffeners are welded to the bottom plates therefore the NCR has not been resolved. QA Inspector informed SMR Eric Tsang of the above NCR resolution status.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable

WELDING INSPECTION REPORT

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contract documents.

Summary of Conversations:

Conversations noted in items observed.





Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prue,Erik	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer